



Staff Report

Operations – Capital Projects Division

Report To: COW-Operations_Planning_and_Development_Services
Meeting Date: June 11, 2024
Report Number: CSOPS.24.043
Title: 125 Peel Street Servicing Follow-up
Prepared by: Mike Humphries, Senior Infrastructure Capital Project Coordinator

A. Recommendations

THAT Council receive Staff Report CSOPS.24.043, entitled “125 Peel Street Servicing Follow-up”;

AND THAT Council direct Staff to proceed with the design and construction of Peel St S with the Level of Service as described in Servicing Alternative A: Fully service Peel St S (water, wastewater, third party utilities) with watermain replacement only on Alice St and Baring St as outlined in CSOPS.24.018;

AND THAT Council direct Staff to proceed with Peel St S Cross-section Alternative 2: Full Urban Cross Section and Multi-use Trail as outlined in CSOPS.24.018;

AND that Council direct Staff to replace the deficient watermain on Alice St with Cross-section Alternative 2: Existing rural cross-section (restoration of disturbed areas) including drainage improvements and intersection improvements at the Alice St and Lansdowne St intersection as outlined in CSOPS.24.018;

AND that Council direct Staff to replace the deficient watermain on Baring St with Cross-section Alternative 2: Existing rural cross-section (restoration of disturbed areas) as per Baring St Alternative 1 including drainage improvements and intersection improvements at the Baring St and Peel St S intersection as outlined in CSOPS.24.018;

And that Council approve increasing the engineering contingency by \$130,000 to allow for legal surveying, additional communications and other miscellaneous costs.

B. Overview

This report was requested by Council at the May 13, 2024 Council Meeting to address the engineering and design concerns from the deputations received at the April 30, 2024 Committee of the Whole meeting related to Staff report [CSOPS.24.018 125 Peel Street South Servicing Public Information Centre Follow-up](#) .

C. Background

A Public Information Centre (PIC) was held on March 7, 2024 to present possible servicing alternatives and potential road cross-sections for Peel St S, Baring St and Alice St and to obtain comments from the public.

A follow up report outlining the potential servicing alternatives and road cross-sections to be considered was presented to Committee of the Whole on April 30, 2024. This report provided a summary of the comments received from the March 7, 2024 PIC. The project Engineer Jamie Witherspoon from WT Infrastructure Solutions Inc. provided a brief presentation of the preferred alternatives and was available to answer any questions. The Committee of the Whole decided to “table” the report.

CSOPS.24.018 was then discussed at the May 13, 2024 Council meeting. After a lengthy discussion Council provided direction to proceed to 60% design and to prepare a report addressing concerns from the deputations. This report contains responses to the engineering and design questions from the deputations. Importantly, the CIHA order has simply established the permitted land-uses at 125 Peel Street and there remains extensive planning analysis to come following the submission of a site plan application. Through this process, staff ensure that relevant studies and analysis are completed in relation to access to the development, landscaping, drainage and more. As such, comments submitted on this report that are tied to the site plan process cannot be addressed at this time.

Staff cannot proceed with the 60% design until Council provides direction on the servicing options and cross-section selection as outlined in CSOPS.24.018. The project cannot currently move forward without direction.

D. Analysis

At the May 13, 2024, Council meeting Staff were directed to respond to the deputations by concerned residents and report back to Council. Council also directed Councilor Porter as the Operations Chair to meet with the design team and residents to discuss options. Staff and Jamie Witherspoon from WT infrastructure met with Councilor Porter on May 28, 2024. This section will provide Staff responses to engineering and design issues in the deputations from the April 30, 2024 Committee of the Whole meeting, a summary of the discussions with Councilor Porter and the reasoning for the design recommendations.

[Deputation B.1.1: Paul Reale](#)

Mr. Reale’s concerns are related to the Campus of Care Development, the CIHA order, the lack of planning for the secondary plan area and lack of transparency.

Traffic Impact in Thornbury West: Mr. Reale refers to Staff Report [FAF.21.040](#) for the purchasing of the property and the “potential for providing an enhanced intersection at Grey Road 113 and Hwy 26” and incorrectly asserts that “Suddenly, Town staff are recommending that all traffic for the Community of Campus of Care be directed down Peel Street South with a

recommendation to consider a future roundabout to slow traffic and allow for pedestrians and cyclists to cross Highway 26 to access Peel Street North.”

Staff Response:

The Town still owns the property to the southeast of the intersection allowing for potential future upgrades if needed. Any such upgrades to the intersection fall under the jurisdiction of the Ministry of Transportation (MTO) and will be completed by the MTO in consultation with Grey County and the Town. These upgrades are not part of the 125 Peel St Servicing project.

To clarify, Staff are not recommending that all traffic be directed down Peel St S. However, Peel St S will have increased traffic and the Campus of Care will require at least one access off of Peel St S, likely more. Peel St S is the most convenient route and vehicles, cyclists and pedestrians will use it. This area is expected to undergo significant changes, so the design must account for future conditions.

As part of servicing 125 Peel St. South, the road will be reconstructed to meet the Town Standard, as the current configuration does not comply with any standard. According to the Town’s Engineering Standards, urban roads must adhere to one of the cross-sections used for both Town reconstruction projects and new developments. While there is room for deviation, a rural cross-section is inappropriate for this urban area. From a design perspective, not upgrading a potential desired route to meet future demands poses a liability.

As suggested in CSOPS.24.018, the Development Charges Background Study identified this section of Peel St S as a future “Collector Road”. This designation indicates that once the area is developed it will have increased traffic. A collector road serves to move traffic from local roads to arterial roads. In this context, the local roads include the future secondary plan area (Baring St, Alice St) and the arterial roads are Hwy 26 and Grey Road 113. Peel St S will act as a collector road within this transportation network.

Although a collector road should have a minimum width of 12m with a 26m wide right-of-way, the existing right-of-way is only 20m wide. The Engineer has completed a functional review and has determined that either of the Town standard cross sections will meet the future needs of this area. The recommended minimum pavement width for Peel St is 7.5m with a MUT; anything narrower would be insufficient for a road of this type and would be considered unsafe. The minimum safe pavement width with on-road cycling lanes is 9 meters, which is 0.5 meters wider than the Town's standard for local roads.

As presented in PIC #1 and discussed in the follow up report, the Town has initiated a Traffic Operations and Impact Study for the entire area surrounding the Campus of Care. The study is still in its early stages and will not advance further until the Campus of Care Site Plan is progresses and Council provides direction on the servicing approach and cross-sections. The Traffic Engineers have reviewed the concept for the Campus of Care and provided some preliminary recommendations. These preliminary findings were included in both the PIC presentation on March 7, 2024, and the follow up report to the Committee of the Whole on April 30, 2024.

The first preliminary draft of the Traffic Operations and Impact Study recommends the following:

- 1) The intersection of Beaver St/Lansdowne St and Alice St should be reconstructed to align the west approach of Beaver St with Lansdowne St.
- 2) Traffic signal control should be considered at the intersection of Hwy 26 and 10th line/Grey Road 113 (Traffic signals are warranted under 2033 forecast total traffic conditions), this is consistent with the Transportation Master Plan. This intersection is not the Town's jurisdiction and is outside of the project scope.
- 3) The intersection of Peel St S and Arthur St (Hwy 26) should be monitored in the future for changes in traffic control. (i.e. Traffic control signals are not warranted under 2033 conditions)
- 4) Site design should provide for minimum site distances for the access on Grey Road 113.

Mr Reale also asks "Will this type of haphazard planning result in two roundabouts roughly 800 metres apart?"

Staff Response:

Roundabouts can be placed at similar distances to traffic signals. Typically, the minimum distance between intersections is around 200m with 300m or more being preferred for optimal traffic flow. Greater distances generally allow for higher speeds, while shorter distances can reduce speeds, but may also lead to congestion. An 800 m gap between roundabouts is more than sufficient. Staff are not aware of any plan to install two roundabouts, but it remains a possibility.

Deputation B.1.2 Melissa Herod

Mellisa Herod has concerns related to the design of the multi-use trail regarding safety and traffic and the use of Peel St S.

"Safety and Traffic Concerns: The design envisions up to 300 cars daily using Peel Street South, an area proposed for simultaneous heavy pedestrian and cyclist usage. This design increases the risk of vehicular accidents involving pedestrians or cyclists, particularly near the Campus of Care entrance and residential driveways. Such an arrangement, where trail users must navigate across driveways and a busy street,"

Staff Response:

From a design perspective, a multi-use trail is ideal, as it separates pedestrians and recreational cyclists from motorized vehicles, enhancing safety. Additionally, along the 600-meter alignment (excluding the Campus of Care), there are only two driveways. Multi-use trails, like sidewalks or

bike lanes, require proper signage and vigilance from both drivers and trail users at any potential intersections.

There is a valid concern in terms of crossing Hwy 26 which will need to be addressed in consultation with the MTO and with appropriate signage; Staff are confident that safety can be improved at the intersection through the design.

Impact on Local Residents:

“The trail’s proposed placement in front of residential properties disrupts the peaceful enjoyment of homes, creating a direct conflict between vehicular, pedestrian, and residential space. This proximity is unusual and was not convincingly justified during the consultation phases. The lack of alternative placements for the trail, or even a discussion on possible relocation”

Staff Response:

Staff acknowledge that this is a change from their current condition, but the comment that the proximity is unusual is incorrect. The proposed multi-use trail is within the Town’s right-of-way and in a standard location. The right-of-way is absolutely the right location for a trail or sidewalk. Sidewalk is commonly installed less than 1.0m from the property line.

No alternative placements were provided in the PIC because the west side of Peel St S in the boulevard is the only location considered safe and appropriate. There are no other reasonable alternatives to consider.

Suggested Alternative Design

Peel St S is the best location for the MUT. The path must be installed where it is needed. This MUT will provide an important linkage from Grey Road 113 and the Campus of Care to the Georgian Trail, the Waterfront and Tomahawk Golf Course. This is the recommended approach from the studies completed.

Clear Cutting of Mature Trees and Extent of Tree Removal:

Staff Response:

The municipal right-of-way is a Town owned property/corridor intended to provide access and servicing to the residents. This includes access for emergency services, garbage/recycling collection, water, wastewater, storm sewer/drainage as well as third part utilities such as hydro, gas and communications. With reconstruction to an urban cross-section the entire right-of-way is required to complete the construction. Almost all of the right-of-way is required for the underground work with room for the contractor to work safely, i.e. maintain access for residents (temp lane) and emergency services, temporary municipal water during construction etc. With an urban-cross section the entire right-of-way is reshaped and regraded to ensure that all stormwater from the right of way is directed to the gutter line of the curb and into the storm sewer. Considering all of this, it is not possible to retain all the trees. Every effort will be made to retain as many trees as possible. There may also be some trees removed to ensure

proper sight lines and to address safety concerns. There are existing driveways that currently do not appear to have proper sight lines and will have to be addressed with the design.

There were 204 trees identified in the ROW within the entire project limits of Alice, Baring, and Peel Streets. As per the recommendations of the Staff Report, Baring St and Alice St will only be replacing watermain for now which is installed within the paved surface of the road. Therefore, it is not anticipated that there will be any tree removal on either of these streets except for at the intersection of Peel St and Baring St and at Alice St and Beaver St/Lansdowne St intersection. This reduces the number of trees that may be impacted by construction from 204 to less than 40 trees. With municipal infrastructure projects, trees are not “clearcut”. There will be a methodical approach to look at trees that need to be removed or protected. This is part of the design process. Once the design is advanced to the level of design required to confirm if the trees need to be removed or not, the designer will be able to identify which trees will have to be removed. One of the advantages of the multi-use trail approach is that it can meander a bit to avoid trees. It is not possible to do this with the road.

Accuracy of Planning Documents

There are notable discrepancies in the GIS/Topographical surveys presented, specifically regarding the delineation of property lines and rights of way. These inaccuracies necessitate an independent review to ensure that all planning is conducted within legal bounds and with accurate data. For example the current town property line does not include the ditch on the east side of Peel St.”

Staff Response:

The aerial views in the presentation were from the most recent County GIS available. The drawings and maps presented were the best available information that met the visualization requirements of this type of presentation. It is widely known that there are minor issues with the lot fabric applied to aerial imagery/GIS. These are not design drawings or legal surveys. That work will be completed prior to implementation. The graphics were meant for illustrative purposes only to show alternatives.

The presentation did not specify any particular trees to be removed. Staff have visited the site numerous times, and there are many legal markers along Peel St S. Additionally, staff have requested additional funding from the Council to conduct a thorough legal survey for increased accuracy before any tree removal.

As noted in the PIC, the ditch on the east side of Peel St S between Hwy 26 and Baring St is not on Town property. There are survey bars in place indicating that the edge of the right-of-way is part way up the roadside bank of the ditch on the east side of the road. The west side of the right of way is just behind the row of large diameter maple trees. There is an existing garage that is very close to or on Town property. This will be confirmed by a legal surveyor.

Compliance with Environmental and Forestry Legislation:

The removal process must be compliant with The Forestry Act. Independent assessments by qualified arborists and surveyors would ensure that decisions are made with a comprehensive understanding of the environmental impacts and based on accurate, unbiased information.

Staff Response:

Forestry legislation addresses forests on private or crown land. This is a municipal right-of-way or highway. The Town does not need any permits from any other authority to remove trees or vegetation within their right-of-way for an infrastructure project. An arborist has been retained for the project.

[Deputation B.1.3 Christine Sivell](#)

All concerns were related to the development property and not engineering or design issues.

[Deputation B.1.4 Jilliane Thomson](#)

The deputation is related to the development, transparency, CIHA order, secondary plan, and other planning issues.

[Deputation B.1.5 Wendy and Thomas Maloney](#)

The Maloney's have many concerns related to the Campus of Care and communications which Council is aware of.

Their main concern related to design is Traffic Flow.

Traffic Flow

In particular the developer's desire to place two of three access points on Peel St S into the Campus of Care, severely disrupting an existing neighborhood and threatening public safety;

Staff Response:

Staff acknowledge that this represents a change from current conditions. Peel St South is anticipated to experience increased traffic in the future. Located within the "settlement area of Thornbury," this part of Thornbury has always been intended for eventual development. The Development Charges Background Study designates Peel St S as a future collector road, necessitating a design that addresses future requirements. The engineer will address any safety concerns.

The best way to ensure public safety is through thoughtful design, which includes proper lane width, sight lines, and the separation of cyclists and pedestrians from vehicular traffic via an in-boulevard multi-use trail. The Campus of Care property fronts onto Peel St S and should have access to Peel St. Accesses are typically discouraged from County Roads due to higher speeds and traffic volumes. Generally, the safest access point is from the lower-class road, in this case, Peel St S. The location of the entrances has not been decided and will be reviewed during the Site Plan review process. This is not expected to affect the road design.

The deputations referred to the traffic estimates as being wildly conservative referring to 300 vehicles per day.

Staff Response:

That statement is inaccurate. The actual volume presented is 300 vehicles per hour during peak hours in the morning and evening. This is a conservative estimate, representing the worst-case scenario.

Deputation B.1.6 Bill Abbotts

I maintain “aligns assumption is severely flawed.”

“the Transportation Master Plan, of which I was a committee member, does not promote Multi Use Trails in urban settings. The brief mention of separated Multi Use Trails were meant for higher speed, higher volume roads without multiple driveways and high volumes of pedestrians.”

Staff Response:

The Transportation Master Plan identifies Alice and Peel St S as "Core Active Transportation Routes," aligning with considerations for "All Ages and Abilities Design Guidance." This thorough consideration was addressed in the Active Transportation Study by Mobycon, which recommends an in-boulevard multi-use path. Mobycon, composed of international transportation engineers specializing in active transportation, provides highly informed recommendations. An expert in active transportation specifically recommends an in-boulevard multi-use path on the west side of Peel St South, and the project engineer agrees that this is the best approach for Peel St S.

Excluding the 125 Peel St property, there are only two existing driveways, one of which is entirely encroaching on Town property and will be removed during construction. Driveways are not a concern. Once the road is brought up to standard, multi-use trail installed and proper sight lines are provided it will be much safer.

Bicycles especially heavy e-bikes ridden by novice riders are extremely dangerous when combined with pedestrian traffic, especially seniors with mobility devices. OTM Book 18 backs this up.

Staff Response:

Staff, and more importantly, the engineer responsible for the design, partially agree with this interpretation of MTO Book 18. However, Book 18 clearly indicates that this approach is acceptable and provides detailed guidance. It is important to note that MTO Book 18 is cyclist-focused. Nonetheless, section 4.3.4 addresses in-boulevard multi-use paths. Additionally, the MTO Bikeway Design Manual identifies this as an active transportation path.

According to the Ontario Traffic Manual Book 18 - Page 70 - The TAC Geometric Design Guide for Canadian Roads (2017) suggests separating pedestrians and cyclists where there is:

- More than 20% of path users are pedestrians and total user volumes greater than 33 persons per hour per metre of path width, or
- Less than 20% of path users are pedestrians but total user volumes are greater than 50 persons per hour per metre of path width.

For Peel St S, it is anticipated that more than 20% of users will be pedestrians, but user volumes will be less than 99 persons per hour (peak) - 3 m x 33 persons per m of path width. The justification for this is that the Georgian Trail in this area averages 164 users per day. Subject to the design of the Campus of Care paths, we anticipated widening the trail around the 125 Peel Street site, and reducing the width as it approaches Hwy 26. It is not anticipated that a large percentage of limited mobility users will be leaving the Campus of Care site unless escorted by a staff or family member. Signage will be required. This will be looked at in depth with the detailed design.

I am not able to find any information on the *Active Transportation Study*?

Studies are not typically shared in draft form. Once the studies are finalized and reviewed the Town may choose to post them on the webpage. In this case, the study has recently been posted on the project webpage.

The proposed MUT on Peel St N is a dangerous mistake just waiting for accidents to happen if it is constructed as proposed! It is not a safe nor pedestrian friendly town standard, nor should it be in urban areas! Pedestrian cycle (especially e-bike, cargo bikes, and bikes with trailers) conflicts will happen on the 2.7 metre MUT.

Peel St North is not part of this project. The MUT on Peel St North has been approved by Council. The proposed MUT on Peel St S is safe. It has been reviewed by traffic specialists and professional engineers. While Staff agree that 3.0m or more would be preferable, the width was reduced due to the 20m right-of-way and the desire to minimize the impact on trees. It is important to recognize that the Georgian Trail is 2.7 to 3.0m wide and is accepted as an enjoyable and safe multi-use trail suitable for all users.

Cyclists motor vehicle incidents will occur on the narrow roadway with barrier curbs.

Please do not keep repeating this dangerous mistake.

Put safety first. Safety for pedestrians, safety for cyclists, safety for motor vehicles.

Both staff and the project engineers agree that a narrow road with barrier curbs is not a good option for on-road cycling, which is not what was proposed. The preferred option in the PIC is a 7.5-meter-wide urban road with barrier curbs and a MUT. With this option, cyclists use the MUT rather than the road, allowing for a slightly narrower road that enhances safety through traffic calming. If a MUT were not proposed, a 9.0-meter-wide asphalt road with a minimum 2.0-meter-wide sidewalk would be required. Both options meet Town standards and are considered safe.

Barrier curb and gutter are the safest options for the majority of road users. The concrete barrier curb and gutter are the Town Standard curb and the recommended curb for this project. It is the industry standard and is preferred by almost all municipalities. Barrier curbs act as physical barriers that help prevent vehicles from leaving the road unintentionally, providing a clear delineation between the roadway and pedestrian areas. This reduces the risk of accidents, especially in urban areas where pedestrians are present. It also protects drivers by reducing collisions with poles, trees, hydrants, etc., and helps deter illegal parking in the boulevard, which can interfere with sightlines and reduce safety.

Staff and the design team were not able to find any literature to support the claim that barrier curb is dangerous. This claim is not consistent with our findings.

According to MTO Book 18 which Mr. Abbotts refers to frequently in his deputation, the “Design cyclist” which accounts for up to 56% of users is “interested but concerned”. As you can see in Table 2.1 below (from MTO Book 18) the design cyclist prefers separated cycling facilities. A MUT is a type of separated cycling facility. We should not be designing “Core” active transportation facilities for the highly confident experienced riders who account for only 4-7% of users especially in an urban setting.

Section 2 · Design Users

Table 2.1 – Types of Cyclists

DESIGN CYCLIST			
	Interested but Concerned	Somewhat Confident	Highly Confident
	<ul style="list-style-type: none"> Strong preference for separated cycling facilities or very low-volume and low-speed streets Cycling frequency depends heavily on having a network of low-stress facilities Can generally negotiate simple low-speed interactions with motor vehicles at intersections 	<ul style="list-style-type: none"> Comfortable cycling on-street and interacting with moderate-speed traffic Preference for separated cycling facilities or low-volume and low-speed streets Cycling frequency increases as network of low-stress facilities expands 	<ul style="list-style-type: none"> Comfortable cycling on-street and interacting with higher-speed traffic Preference for cycling facilities that allow for easy overtaking and efficient movement Cycling frequency not necessarily affected by network
% of population	• 51–56%	• 5–9%	• 4–7%
Stress tolerance	• Low	• Moderate	• High
Skill level	<ul style="list-style-type: none"> Experience varies Ability to anticipate and mitigate basic hazards 	<ul style="list-style-type: none"> Comparatively experienced Ability to anticipate and mitigate common hazards 	<ul style="list-style-type: none"> Highly experienced Well-developed ability to anticipate and mitigate most hazards
Typical demographic profiles	<ul style="list-style-type: none"> Age: All* Gender: any Ability: includes individuals who may have a disability or are new to cycling 	<ul style="list-style-type: none"> Age: 18–65+ Gender: women are under-represented Ability: individuals with a disability are under-represented 	<ul style="list-style-type: none"> Age: 18–65+ Gender: women are under-represented Ability: individuals with a disability are under-represented
Typical travel speed	• 10–25 km/h	• 15–25 km/h	• 20–35 km/h

* Children under 12 are an essential cycling demographic but their abilities vary significantly and they may not yet have the cognitive ability to detect risks, negotiate conflicts or ride a bike independently. Many municipalities have by-laws allowing children to cycle on sidewalks for this reason.

After much discussion with a 2nd previous council and TBM staff of the time, all Thornbury West will be this profile. It is more of a standard than the MUT profile.

Town Response:

Staff agree there was extensive discussion and significant effort put into developing a suitable cross-section at the time. A workshop with engineers and planners, along with the Council of that period, resulted in a recommendation for an 8.5-meter urban cross-section with a barrier curb and sidewalk on one side. After a deputation, the Council decided to change the curb type to mountable for the Thornbury Road Infrastructure Project (TRIP), later known as Thornbury West.

Since then, the curb type was reviewed during the Town Standards update, and Barrier Curb and Gutter was approved by Council. A large group, including senior management, operations management, operational staff, internal engineers, third-party engineers, planners, technologists, and others, determined that Barrier Curb and Gutter is the best choice for the Town through the Engineering Standards update. The Town Standards now require Barrier Curb and Gutter.

As seen in Mr. Abbotts' photo of Louisa St, mountable curbs allow vehicles to leave the road easily, creating a dangerous situation. Staff do not recommend mountable curbs for this situation, which involves a low-speed urban local road.

Council Directed Meeting with Councilor Porter

On May 29, 2024, Staff along with the project Engineer Jamie Witherspoon (WT Infrastructure) met with Councilor Porter to discuss resident concerns. There were good discussions around transparency, communications, and trust among other things, but this report will focus on the engineering and design issues. The main design issues identified were as follows:

“Minimalistic View”:

Councilor Porter suggested that designers should adopt a minimalistic approach to the use of the right-of-way for construction, aiming to avoid disturbing the entire area. She also mentioned that the cross-section presented by Bill Abbotts in his deputation, featuring an 8.5m road with 1.25m fog lines, aligns with her vision of a minimalistic design.

Staff Response:

The Town Standards represent the minimum requirements. A 20-meter right-of-way is necessary for a full reconstruction. The Town Standard for a road is 8.5 meters wide, featuring barrier curb and gutter, with a sidewalk on one side. It was not clear to staff why a mountable curb would be considered "minimalistic" or why there would be a need to deviate from this much safer standard.

No Sidewalk/MUT or delaying the Sidewalk/MUT Installation:

Councilor Porter indicated that there are concerns related to safety crossing highway 26 at Peel St and the installation of a MUT. She (and residents) also asked if the sidewalk / MUT could be on the other side of Peel St S.

Staff Response:

Staff have heard this concern during PIC#1 and subsequent deputations. The main concern here is the changes in the use of the right-of-way and the impact of increased use on the two existing residences.

Regardless of whether a sidewalk or MUT are provided the full 20m right-of-way will be required for construction. Many trees will have to be removed, the existing ditches filled, and the boulevard graded to provide positive drainage to the curb. If the sidewalk/MUT were not installed with the construction, it is expected that the cost to construct would be 2 to 3 (or more) times more expensive in the future. There is also the risk that the work would never be completed and the road left in an unsafe condition long term. There are no safety issues with a properly installed MUT or sidewalk. The Peel St/Hwy 26 intersection is not within the scope of this project to redesign or reconstruct. However, safety is a key consideration in the design, and there are numerous ways to mitigate risks and improve safety at the Hwy 26 crossing until the MTO reconstructs the intersection in the future. Staff and designers are confident that, through consultation with the MTO, the crossing can be made much safer.

The design engineer and Staff concur that an in-boulevard facility must be provided before the Campus of Care opens for safety reasons. There is no benefit in delaying the installation of the sidewalk. The Campus of Care will have people with limited mobility, and not providing a sidewalk (whether they use it or not) is a significant concern for any potential destinations. Most limited mobility residents are not expected to cross Highway 26, but with visitors arriving by active transportation, the route will be crucial, especially for those coming from Lora Bay and along the Georgian Trail.

When the Campus of Care proceeds and installs the proposed sidewalk and trail system there will be trails at either end of Peel St S. By not installing the trail now there would be a “gap” in the system forcing vulnerable users from the Campus of Care (and others) onto the roadway. This is unsafe and a huge liability for the Town.

People tend to follow desire lines—paths they naturally choose to take. Ignoring these in design results in higher-risk situations where safety infrastructure is lacking, increasing the risk of conflicts. There are four specific destinations connected to Peel St. South and the Campus of Care:

- I. Campus of Care itself – Staff, visitors, and facility users (daycare, health care, etc.) will want to access that site. If they are coming from parts of Lora Bay or along the Georgian Trail, the desire line is via Peel St S.
- II. Georgian Trail – Like above this will be a two-way route; however, this will provide access to active transportation routes for both residents and visitors.

- III. Waterfront – the waterfront is 1 km from the Campus of Care, which represents a 30-40 minute round trip walking allowing for mobility concerns. This is not an unreasonable distance for visitors to walk with a mobile resident or push in a mobility device.
- IV. Tomahawk Recreational Complex – This is a desire point for the entire community and access via the Georgian Trail, Lora Bay and Alice St will be improved by the inclusion of a separated pathway.

As indicated in the CSOPS.24.018 report, “The recently completed Transportation Master Plan (2022) identified both Peel St S and Alice St as “Core Active Transportation Routes”. In the absence of a secondary plan the Town initiated an Active Transportation Study for the area to ensure that the Town was making the best possible decisions for now and the future. The Official Plan mandates consideration of all transportation modes, including active transportation (walking and cycling).

Based on these studies and the Official Plan, there is a clear need for Active Transportation on both Peel St S and Alice St within the project limits. The Active Transportation Study proposes an in-boulevard Multi-use Trail on Peel St S, directing traffic towards the Georgian Trail and requiring the crossing of Hwy 26. The Study also identified this crossing as an area for improvement, recommending a roundabout to slow traffic and allow safer pedestrian crossings of Hwy 26. Although intersection redesign is not part of this project, it should be monitored. The Town has been in contact with the MTO and will work with them to develop a plan for improved safety at the trail crossing of Hwy 26 once Council provides direction.

In summary, it does not make sense to eliminate or postpone the installation of the MUT or sidewalk along the west side of Peel St S. Two main safety concerns are the crossing at Highway 26 and the pedestrian, cycle, and vehicle conflict on Peel St S. With the opening of the Campus of Care, there will be increased vehicle, cycling, and pedestrian traffic, including vulnerable users. Installing a sidewalk and bike lanes or a MUT will remove the conflict and make the street safer, even if no improvements are made at the intersection. Not installing a sidewalk/MUT would compound the problem, creating two safety issues. Staff are confident that the crossing can be made safe through consultation with the MTO and good design. Significant deviations from the Town standard increase liability for both the Town and the Professional Engineer overseeing the project.

Key Design Elements

There has been a lot of information circulating regarding elements of the road design. This section is intended to summarize the information for clarity.

Road Width:

The Town Standards have two acceptable Urban Road Standards

- 1) Local Urban Road 20m ROW with Parking
This is the standard that should be used for all local urban roads, it specifies barrier curb and gutter with 4.25 m lanes. This allows for on street parking and sufficient room for cyclists to share the road.
- 2) Local Urban Road 20m ROW with No Parking
This standard also specifies barrier curb and gutter and requires 3.75m lanes. This does not allow for on street parking or cyclists on the road.

As Peel St South is anticipated to become a “Collector Road” for this area in the future, it is important to consider widening the lanes. The Town's Engineering Standards do not have a specific cross-section for an urban collector road but provide minimum criteria for both minor and major collector roads. The minimum asphalt width for a minor collector is 12 meters, and for a major collector, it is 14 meters. Both require a road allowance of 26 meters. However, the road allowance for Peel St S is only 20 meters, and there are no plans to pursue property acquisition at this time, making it difficult to provide a 12 or 14-meter paved width.

Therefore, the right-of-way (ROW) requirements should be determined through functional design. The additional width in the engineering standard is intended to allow for turn lanes (center, right, left, etc.). In the case of Peel St S, the engineer's preliminary review does not anticipate the need for this additional width. However, slightly wider lanes will be necessary to accommodate the expected use, including larger vehicles such as commercial deliveries and emergency vehicles.

Drainage

It is the Town's responsibility to address drainage within the right-of-way. When reconstructing a roadway we must consider this and manage the drainage. An urban cross-section will direct rainwater from the boulevards and off of the road into the gutter line of the curb, into the proposed storm sewer and to an acceptable outlet. This will reduce maintenance costs and extend the life of the road.

Curbs

Barrier Curb and Gutter:

Barrier Curb and Gutter is the Town Standard curb and must be used for all low-speed urban roads. Barrier Curb and Gutter is the industry standard and the most common type of curb. It is preferred by almost all municipalities. The following are a few of the benefits:

- **Safety:** Barrier Curb acts as a physical barrier that helps to prevent vehicles from leaving the road unintentionally. It provides a clear delineation between the roadway and pedestrian areas. This helps to reduce the risk of accidents especially in urban areas where pedestrians are present. It also protects the driver by helping to reduce collisions with poles, trees, hydrants etc.

- **Drainage:** Barrier curbs channel rainwater away from the road surface and into the storm sewer system and help to prevent flooding. The higher back on barrier curb keeps the water on the road during heavy storm events (storage) and thereby helping to prevent flooding and damage on private property.
- **Traffic Control:** Barrier curbs are more pronounced and help to guide vehicles and regulate traffic flow by providing physical boundaries (traffic calming). They also can be used to better delineate driveways and discourage illegal parking in the Town's boulevard which also improves safety.
- **Aesthetics:** Barrier curbs can enhance visual appeal of the road and surrounding area. i.e. instead of sand, ruts and potholes along the road edge they provide a much cleaner finished look.
- **Accessibility:** Curbs play a crucial role in providing accessibility for pedestrians, cyclists and individuals with disabilities. They help to define safe paths for pedestrians and provide a barrier between the road and the sidewalk or multi-use path.
- **Maintenance:** Barrier curb also protects the road edges/road base and reduces erosion of the boulevard extending the life of the road. Barrier curb is preferred by the Town's Roads and Drainage Division for ease of plowing snow and reducing damage and costly boulevard repairs.

Mountable Curb:

- Mountable curbs have a much lower profile that makes it very easy for vehicles to drive over them. They were considered for this project but quickly discounted as mountable curb does not provide the physical barrier for safety that the barrier curb and gutter does.
- Mountable curbs do not discourage illegal use of the Town's boulevard, which is a safety concern due to sight lines.
- Areas with mountable curbs sustain regular damage, leading to costly repairs. This type of curb was used in new developments where driveway locations were unknown at the time of construction, but this practice was discontinued over 10 years ago.
- From an engineering perspective, mountable curbs channel rainwater but are less effective than barrier curbs and gutters. They also provide less on-road storage during heavy rainfall, offering less flood protection.
- If mountable curbs were selected, the Town's standard cross-sections could not be utilized. A new cross-section would need to be developed with an increased clear zone behind the curb (1.2 meters for barrier curb, 3.0 meters for mountable curb). This would

push all above-ground infrastructure (trees, hydro poles, hydrants) back to the property line, impacting existing trees and possibly requiring a widened right-of-way.

- Mountable curbs are typically used for higher speed roads (70km/hr +).

It has been suggested that barrier curb is not safe for cyclists. Staff and the project Engineers investigated this claim and could not find any information to support the claim. There is no mention of this in the MTO Book 18 or in the TAC Guidelines or anywhere else. Staff note that barrier curb and gutter are used adjacent to cycle lanes almost everywhere including large cities with much higher traffic volumes such as Toronto which is considered a leader in active transportation.

Active Transportation:

There are many guiding documents that we can rely on for guidance as it pertains to Active Transportation. These include the Town's Official Plan, the Transportation Master Plan (2022), the Engineering Standards (2023), and Campus of Care Active Transportation Study (2024).

The Town's Official Plan outlines policies on how land in the Town should be used. It is prepared with input from residents and stakeholders and helps ensure that future planning and development will meet the specific needs of the community. The Official Plan has numerous references that provide some guidance:

- Section A1: Community Vision and Guiding Principles
 - "Enable residents to walk or cycle to work or shop."
- Section A1.1: Guiding Principles
 - "To establish an integrated transportation system that safely and efficiently accommodates various modes of transportation, including walking, cycling, automobiles, and trucks."
- Section A3.1.2: Strategic Objectives
 - "Encourage reductions in the use of private automobiles by promoting active transportation and the use of Transportation Demand Management measures such as public transit, cycling, and walking."
- Section D2.5: Active Transportation
 - "Active transportation (walking and cycling) is an important component of building active communities and reducing dependence on single-occupant vehicles. To plan for and encourage walking and cycling, Council shall:
 - Promote a connected, safe, and well-designed active transportation network, including exclusive facilities for pedestrians and cyclists

(sidewalks, bicycle lanes, trails) connected to origins and destinations within and beyond the Town.

- Require the provision of sidewalks in settlement areas and hamlets, where appropriate.
 - Investigate and provide for bicycle lanes wherever possible in the construction or reconstruction of roads and bridges.
 - Encourage and support measures for barrier-free design of pedestrian facilities.
 - Support an accessible network for all community members, including barrier-free design considerations for sidewalks, curb cuts, pedestrian crosswalks, and signals.
 - Encourage pedestrian and cycling amenities, such as water fountains and benches along the trail network.
 - Ensure all pedestrian and cycling routes are designed to be safe."
- Section A3.5.2: Rural and Open Space Character Strategic Objectives
 - "Preserve and improve access to open space and shoreline areas, including the Niagara Escarpment, Nipissing Ridge, and the Georgian Bay shoreline."
 - Section A3.8.2: Tourism and Recreation Strategic Objectives
 - "Recognize and maintain the Georgian Trail as a regionally significant trail link, and encourage appropriate access points in the long-term development of a Town-wide trail system."
 - "Create a high-quality, all-season trail system, contributing to the development of the Town as a world-class tourism destination."
 - Section A3.9.2: Infrastructure Strategic Objectives
 - "Encourage the establishment of an integrated transportation system that safely and efficiently accommodates various modes of transportation, including cycling, walking, automobiles, trucks, and public transit where feasible."
 - "Ensure the construction or expansion of infrastructure occurs in a manner compatible with adjacent land uses, cost-effective, and with minimal social and environmental impact."

The Transportation Master Plan (2022) identifies both Peel St South and Alice St within the project boundaries as "Core Active Transportation Routes." The core network aims to establish a protected network encouraging and supporting new adopters and cautious users, serving as

major corridor connections between destinations such as the Georgian Trail, the waterfront, Tomahawk Recreational Area, and eventually the Campus of Care.

The Town's Engineering Standards specify how active transportation facilities should be constructed. For instance, sidewalks are required on both sides of Collector Roads and on at least one side of all Urban Local roads. Active transportation facilities must be implemented and designed according to the TAC Geometric Design Guide for Canadian Roads, the corresponding MTO Design Supplement, Ontario Traffic Manuals (Books 12A, 15, and 18), and the Town's Official Plan.

Campus of Care Active Transportation Study (2024) was commissioned to review existing and future conditions and provide recommendations for active transportation for the 125 Peel St area and across Thornbury. The study recommends a 3.0m wide (minimum) in-boulevard multi-use path for Peel St S.

Recommendation

To ensure flexibility and meet Town standards while providing safety for all users, staff have proposed two options. Given that the road is considered a future collector, we must design for the expected traffic volumes. Both options include in-boulevard facilities (MUT vs. sidewalk) because it would not be safe for pedestrians, cyclists, and vehicles on Peel St S under future conditions (i.e., after the Campus of Care is operational) without one of these facilities.

Staff and Engineers Preferred Option:

Considering the guiding documents, industry standards, and best practices, the recommended option is the Town Standard Urban Cross-section with barrier curb and gutter, featuring 7.5 meters of asphalt, and an in-boulevard multi-use trail along the west side of Peel St S. The multi-use trail will be designed to applicable Standards.

This multi-use trail will accommodate both cyclists and pedestrians, allowing for a narrower roadway asphalt width, which contributes to traffic calming. The 7.5-meter width is the minimum that the engineer is comfortable with, given that the road will function as a collector road with expected emergency and commercial vehicle traffic. Cyclists will use the in-boulevard multi-use trail, and the road will be posted as no parking.

The narrower road width will facilitate traffic calming, and the barrier curb and gutter will serve as a physical barrier to enhance pedestrian and cyclist safety. This configuration meets Town standards and provides maximum safety for all users. Additionally, the narrower road and multi-use trail offer some flexibility, potentially allowing for the retention of some trees, making this the preferred option.

Staff and Engineers Alternative Option:

There has been some opposition to the multi-use trail. While staff believe it is the best option, a sidewalk would also meet Town standards and provide adequate safety. If a sidewalk were to be utilized, it would be a minimum of 2 meters wide. This would require cyclists to use the

roadway, necessitating an asphalt width of at least 9.0 meters (6.5 meters plus two 1.25-meter bike lanes). Combined with the barrier curb for safety, this is also considered a safe and viable option. However, there are a few drawbacks, such as the wider roadway potentially promoting higher speeds and less opportunity to retain existing trees.

Councilor Porters Option from Consultation with Public:

The community suggested that designers adopt a “minimalistic view” of what must be constructed. She indicated that the “Cross-section provided by Bill Abbotts” in his deputation, featuring an 8.5-meter road and fog lines at 1.25 meters, aligns with her idea of minimalism. This minimalistic option would not include a sidewalk for pedestrian safety or any works in the boulevards.

This option has been discussed previously and Staff still cannot support this. It is considered unsafe and unrealistic as outlined above in the analysis. The full 20m right-of-way is required for reconstruction and sidewalk and barrier curb must be provided for safety. Staff recommendations are unchanged from the original report to Committee of the Whole on April 30, 2024, CSOPS.24.018.

E. Strategic Priorities

1. Communication and Engagement

We will enhance communications and engagement between Town Staff, Town residents and stakeholders

2. Organizational Excellence

We will continually seek out ways to improve the internal organization of Town Staff and the management of Town assets.

3. Community

We will protect and enhance the community feel and the character of the Town, while ensuring the responsible use of resources and restoration of nature.

4. Quality of Life

We will foster a high quality of life for full-time and part-time residents of all ages and stages, while welcoming visitors.

F. Environmental Impacts

The construction activities will release greenhouse gases. Encouraging Active Transportation will reduce vehicle use.

G. Financial Impacts

There are two capital budgets funding different parts of this project. The main budget is the servicing of 125 Peel Street which is funded from Roads, Water, and Wastewater Development Charges. The second budget, responsible for the watermain replacement on Alice Street, is the Substandard Watermain replacement which is funded from Federal and Provincial grants. This request is not increasing either project budgets but rather increasing the contract value within the already approved budgets.

The original engineering scope did not include requirements for an Active Transportation Study or a Traffic Impact Study. Soon after starting the design, it became apparent that these studies must be completed. Approximately \$45,000 of the \$60,000 Engineering contingency was used on these studies prior to starting the design. Staff have identified that a legal survey of the project area was also not included in the original scope. The estimated legal survey cost is almost \$50,000.

Staff Time:

In this staff report, we want to emphasize that extensive administrative tasks and public communications (such as emails, calls, in-person check-ins, and tasks coming out of the Public Information Centre) are resulting in additional costs for the Town and community. Staff hours, municipal resources, and extra engineering efforts are being consumed to respond to information requests. Despite providing the requested information, follow-up requests for further details continue to arise. While staff are committed to addressing these inquiries, it diverts time and resources away from advancing the project. This ongoing process has delayed the project following the typical public consultation process, including the Public Information Centre. To date, staff expenses related to these efforts have reached approximately \$60,000 in additional staff time costs, while the Town has accumulated \$14,800 plus HST in additional engineering expenses from contingency budget, despite being only halfway through the consultation process.

Staff are asking for an increase in the Engineering Contingency of \$130,000 to cover the cost of the legal survey and increased communications costs as well any other unforeseen costs that may arise during the design and construction such as additional arborist consultations or geotechnical costs related to excess soil.

H. In Consultation With

Adam Smith, Director of Planning and Development Services

Sam Dinsmore, Acting Director of Finance/Treasurer

Jeff Fletcher, Acting Director of Operations

Allison Kershaw, Manager of Water and Wastewater Services

Pruthvi Desai, Manager of Capital Projects

Jim McCannell, Manager of Roads and Drainage

Jason Petznick, Communications Coordinator

I. Public Engagement

The topic of this Staff Report has been the subject of a Public Meeting and/or Public Information Centre which took place on **March 7, 2024**. Those who provided comments at the Public Meeting and/or Public Information Centre, including anyone who has asked to receive notice regarding this matter, has been provided notice of this Staff Report.

Any comments regarding this report should be submitted to Mike Humphries, Senior Infrastructure Capital Project Coordinator sricpc@thebluemountains.ca.

J. Attached

1. Attachment 1: Plan View with proposed road and MUT
2. Attachment 2: Preferred Alternative Cross Section

Respectfully submitted,

Mike Humphries
Senior Infrastructure Capital Project Coordinator

Pruthvi Desai
Manager of Capital Projects

Jeffery Fletcher
Manager of Sustainability & Solid Waste

Alan Pacheco
Director Operations

For more information, please contact:
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Report Approval Details

Document Title:	CSOPS.24.043 125 Peel Street Servicing Follow-up.docx
Attachments:	- Attachment 1 Plan View with Proposed Road and MUT.pdf - Attachment 2 Preferred Alternative Cross Section
Final Approval Date:	Jun 3, 2024

This report and all of its attachments were approved and signed as outlined below:

No Signature found

Pruthvi Desai - Jun 3, 2024 - 12:02 PM

No Signature found

Jeff Fletcher - Jun 3, 2024 - 1:43 PM

Alan Pacheco - Jun 3, 2024 - 1:53 PM

No Signature found

Shawn Everitt - Jun 3, 2024 - 2:49 PM